

**Department of Transportation
Office of the Chief Information Officer
Supporting Statement**

Flammable Cryogenic Liquids
OMB Control No. 2137-0542

(Expiration Date: August 30, 2021)

Introduction

This is to request the Office of Management and Budget's (OMB) approval for a three-year extension, for OMB Control No. 2137-0542, titled, "Flammable Cryogenic Liquids," which is due to expire on August 30, 2021. This information collection was initiated as a result of a June 16, 1983, final rule [48 FR 27674; HM-115], titled "Cryogenic Liquids." This final rule established marking and certification requirements for tank cars designed to carry flammable cryogenic liquids.

Part A. Justification.

1. Circumstances that make collection of information necessary

This is a request for an extension of an existing approval under OMB Control No. 2137-0542. Approval is requested for the reporting and recordkeeping requirement prescribed in §§ 173.318, 177.816, 177.840, and 180.405. These regulations are set forth under the Federal hazardous materials transportation law (49 U.S.C. 5101-5127). The purpose of these requirements is to ensure that flammable cryogenic liquids (e.g., Hydrogen, Methane) are transported in a manner that will maintain a level of safety consistent with that achieved for other hazardous materials. This information collection supports the Departmental Strategic Goal for Safety.

2. How, by whom, and for what purpose is the information used

The information collected is used by motor carriers, drivers, shippers, and emergency responders to ensure the safe transportation of flammable cryogenic liquids. Additionally, these requirements ensure that proper proactive mitigation measures are taken to preclude any uncontrolled accident in transportation. Additionally, these requirements ensure that if any cargo tank conditions change (i.e., the cargo tank is not performing as previously calculated), it will be inspected before being refilled and reoffered for transportation.

Because flammable cryogenic liquids are extremely flammable, have a high expansion ratio (1-to-600), and must be kept at extremely low temperatures (negative 400 °F) to remain in a liquid state, the HMR sets strict requirements for their transportation. Specifically, the HMR requires that a written record be maintained indicating cargo tank pressure and temperature.

These requirements, as outlined in §§ 173.318(g), 177.840(h), and 180.405(i), include requiring an indication of one-way travel time, the pressure of the tank at discharge, ambient (outside) temperature, as well as other indications of valve pressures during loading and unloading operations. Prior to transportation, this information is provided to drivers to ensure that they are aware of the cargo tank and previous trips. These requirements ensure that a driver can determine that the cargo tank was loaded within its proper limits and that the cargo tank or its insulation has not been compromised. If these requirements are not met, it could lead to a catastrophic release of a flammable cryogenic liquid. This information also allows the driver to take appropriate remedial actions should the temperature of the cryogenic liquid begin to rise excessively or if the travel time will exceed safe limits. By taking proactive remedial actions, a driver can prevent a catastrophic release of the flammable cryogenic liquid.

3. Extent of automated information collection

This burden has been made as simple as possible. This information is considered critical in making evaluations and assuring the safe transport, loading, and unloading of flammable cryogenic liquids. The Government Paperwork Elimination Act directs agencies to allow the option of electronic filing and recordkeeping, when practicable. Due to the hazards of flammable cryogenic liquids, written procedures are required for venting, safety, emergencies, and documentation requirements for drivers. Therefore, electronic filing and recordkeeping is not practicable, and safety needs outweigh allowing electronic filings.

4. Efforts to identify duplication

Information in this collection is unique to the transportation of flammable cryogenic liquids. PHMSA has done its due diligence to ensure that this information is not duplicated. Additionally, PHMSA works with its modal partners, such as the Federal Motor Carrier Safety Administration (FMCSA), to ensure the requirements are not duplicated.

5. Efforts to minimize the burden on small businesses

The burden has been made as simple as possible. It is not feasible to reduce it any further and still maintain an acceptable level of safety to protect the public and property from the dangers inherent in the transportation of flammable cryogenic liquids. This burden is required for all persons transporting flammable cryogenic liquids, because safety outweighs any reduction in burden for small businesses.

6. Impact of less frequent collection of information

This information is not collected for reporting purposes of the Federal Government. It is being collected to ensure that flammable cryogenic liquids are safely transported. It is also an important measure necessary to provide information to shippers and carriers about the condition

of the cargo tanks used to transport these materials, thus enabling repair of these vehicles prior to catastrophic failure. Therefore, PHMSA believes this information is necessary as frequently as it is currently required, in order to maintain safety.

7. Special circumstances affecting conduct of information collection activity

There are no special circumstances. This collection of information is conducted in a manner consistent with the guidelines in 5 CFR 1320.5(d)(2).

8. Compliance with 5 CFR 1320.8.

PHMSA published a 60-Day Notice and Request for Comments under Docket No. PHMSA-2021-0055 (Notice No. 2021-04) on May 18, 2021, in the Federal Register [86 FR 27009] requesting public comment on the renewal of this information collection, along with 3 other information collections.

PHMSA published a 30-Day Notice and Request for Comments under Docket No. PHMSA-2021-0055 (Notice No. 2021-06) on August 10, 2021, in the Federal Register [86 FR 43719] requesting public comment on the renewal of this information collection

9. Payments or gifts to respondents.

There is no payment or gift provided to respondents associated with this collection of information.

10. Assurance of confidentiality.

None of the data collected contain personally identifiable information (PII) or business confidential information. No guarantees of confidentiality are provided to applicants.

11. Justification for collection of sensitive information.

Not applicable. No sensitive information is required.

12. Estimates of burden hours for information collected.

<u>Total Number of Respondents</u>	<u>Total Number of Responses</u>	<u>Total Burden Hours</u>	<u>Total Salary Cost</u>	<u>Total Burden Cost</u>
350	36,400	1,213	\$108,028	\$0

Based on industry estimates, approximately 175 cargo tanks transport flammable cryogenic liquids, making trips twice a week, for a total of 104 annual trips per cargo tank. Each time a cargo tank with flammable cryogenic liquid is transported, the appropriate information must be collected, for a total of 18,200 annual responses (175 cargo tanks x 104 annual trips). Based on historical stakeholder feedback, PHMSA estimates it takes approximately 3.5 minutes per response to record all required information, for a total of 1,062 annual burden hours (18,200 responses x 3.5 minutes). It is estimated to cost \$89.03¹ per hour in salary cost for a total of \$89,612 in annual salary cost (1,061.67 burden hours x \$84.41). PHMSA does not estimate any out-of-pocket expenses.

Flammable Cryogenic Liquids - §§ 173.318, 177.816, 177.840, 180.415	Number of Respondents	Response per Carrier	Number of Responses	Minutes per Response	Total Burden Hours	Salary Cost per Hour	Total Salary Cost	Total Burden Cost
Reporting	175	104	18,200	3.5	1,062	\$89.03	\$94,254	\$0

To ensure the safe transportation of cryogenic flammable liquids, each driver must be provided with the information recorded from the previous trip. Therefore, there is an estimated 18,200 responses for this recordkeeping requirement (175 cargo tanks x 104 annual trips). Based on historical stakeholder feedback, each response is estimated to take approximately 30 seconds per response, for a total of 152 annual burden hours (18,200 responses x 30 seconds). Clerical salary is estimated to cost \$89.03² per hour for a total of \$13,503 in total salary cost (152 burden hours x \$89.03). PHMSA does not estimate any out-of-pocket expenses.

Flammable Cryogenic Liquids - § 173.318	Number of Respondents	Response per Carrier	Number of Responses	Seconds per Response	Total Burden Hours	Salary Cost per Hour	Total Salary Cost	Total Burden Cost
Recordkeeping	175	104	18,200	30	152	\$89.03	\$13,503	\$0

13. Estimate of total annual costs to respondents

PHMSA estimates there are no out-of-pocket expenses, and therefore there is no annual cost to respondents.

14. Estimate of cost to the Federal Government

There is no cost to the Federal Government.

15. Explanation of program changes or adjustments

¹ Occupation labor rates based on 2020 Occupational and Employment Statistics Survey (OES) for “Management Occupations (11-0000)” (<https://www.bls.gov/oes/current/oes110000.htm>). The hourly mean wage for this occupation (\$60.81) is adjusted to reflect the total costs of employee compensation based on the BLS Employer Costs for Employee Compensation Summary, which indicates that wages for civilian workers are 68.3 percent of total compensation (total wage = wage rate/wage % of total compensation).

² Ibid.

There is no change to this OMB Control Number.

16. Publication of results of data collection

There is no publication of the response plans and no statistical techniques are involved.

17. Approval for not displaying the expiration date of OMB approval

This information collection OMB Control Number is prominently displayed in the HMR, specifically under § 171.6, titled, “Control Numbers under the Paperwork Reduction Act.”

18. Exceptions to certification statement

There is no exception to PHMSA’s certification of this request for information collection approval.